

MRT - PHYSICAL ACTIVITY QUANTIFICATION IN SUBACUTE STROKE RECOVERY PATIENTS INCLUDED IN A HOME-BASED PHYSICAL ACTIVITY AND EDUCATION PROGRAM AFTER 6 MONTHS OF MONITORING

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Introduction: Strategies to meet at least 150 min/week of moderate Physical Activity (PA) should be incorporated in the management of stroke survivors (Billinger et al 2014). However, stroke patients accumulate less energy expenditure and daily steps counts than sedentary older adults (Baert et al 2012).

Purpose: The aim of the study was to quantify PA in subacute phase of stroke recovery (SPSR) patients included in a home-based physical activity and education program (HBPAP) after 6 months of monitoring.

Method: An observational study was carried out with 42 post-hemorrhagic and ischemic stroke patients (Age: 63.6 ± 13.3 years; Time after Stroke: 72.5 ± 35.9 days, Barthel Index: 95.2 ± 9.4l and Functional Ambulation Classification: 6.4 ± 1.5) included in HBPAP during six months. Total (TEE) and active (>3 METS) energy expenditure (AEE), steps counts (SC) and total sitting (TST) were measured at first (M1), third (M3) and sixth (M6) month after hospital discharge.

Results: HBPAP maintained PA level.

Daily PA in HBPAP			
	M1	M3	M6
TEE (Kcal.d ⁻¹)	2374 ± 373.4	2666.9 ± 884.7	2637 ± 646.8
AEE (Kcal.d ⁻¹)	523.4 ± 333.5	528.1 ± 349.5	567.4 ± 406.3
SC (Step.d ⁻¹)	4706.6 ± 3512.6	4984.2 ± 3739.4	5642 ± 5165
TST (Min.d ⁻¹)	658 ± 93.9	630 ± 130	654 ± 133

Conclusions: HBPAP patients meet and surpass PA recommendations related to energy expenditure for adults, 215 to 285 Kcal.d⁻¹ (Mazzeo & Tanaka 2001). It is important, whether we consider that for every 287 Kcal.d⁻¹ in free living activity energy, the risk of mortality decreases of 30% (Todd et al 2006). In addition, SC is higher than the average of SC in SPSR (Vanroy et al 2016). HBPAP could be a good strategy to meet daily energy expenditure recommendations and to maintain PA level in SPSR.